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10/788,797	02/27/2004	Mihael Ankerst	BO1-0134US	7859

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EXAMINER

HWANG, JOON H

ART UNIT	PAPER NUMBER
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2166

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/788,797

Applicant(s)

ANKERST, MIHAEL

Examiner

Joon H. Hwang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-94 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-94 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/18/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The claims 1-94 are pending.

Claim Objections

2. Claim 90 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The representation determiner having determining a maximum number of points step, determining a number of points representative of a data quantity step, and contiguously displaying steps in claim 90 is already recited in its independent claim 84.

Claim 84 is objected to because of the following informalities: Claim 84 is unfinished. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-10, 17, 19-46, 53, 55-78, and 82-83 are rejected under 35 U.S.C. 102(e) as being anticipated by Teller et al. (U.S. Publication No. 2006/0031102).

With respect to claim 1, Teller teaches associating a frame with each of a number of intervals in a period (i.e., item 355 in fig. 11). Teller teaches identifying a first data characteristic to be identified for data associable with the number of intervals in the period (i.e., sleep and activity level characteristics are identified, item 360 in fig. 11). Teller teaches mining the body of data to identify a number of first significant intervals, the first significant intervals being intervals for which the first data characteristic is manifested in data associated with each of the first significant intervals (i.e., retrieving a requested data, section 45 on page 6). Teller teaches presenting in the frame associated with each of the first significant intervals a first representation of the data indicative of the first data characteristic (i.e., item 355 in fig. 11).

With respect to claim 2, Teller teaches each interval includes at least a portion of a day (i.e., item 205 in fig. 7 and item 355 in fig. 11).

With respect to claim 3, Teller teaches each interval includes a day and the period includes at least one week such that the frames are presented in a week table having days listed along a first axis and days of a week listed along a second axis (i.e., item 355 in fig. 11).

With respect to claim 4, Teller teaches each interval includes a day and the period includes at least one month such that the frames are presented in a month table having days of a week listed along a first axis and at least one week listed along a

second axis (i.e., item 355 in fig. 11 and a user selectable time intervals, section 73 on page 10 and section 45 on page 6).

With respect to claim 5, Teller teaches the interval includes a day and the period includes at least one year such that the frames are presented in a plurality of month tables (section 73 on pages 10-11).

With respect to claim 6, Teller teaches the first data characteristic includes a variation from an expected quantity (sections 67-68 on page 10 and fig. 9).

With respect to claim 7, Teller teaches the expected quantity includes at least one of an expected number, an expected range, a control limit, and a standard deviation (section 67 on page 10 and sections 56 and 58 on page 8).

With respect to claim 8, Teller teaches the variation from the expected quantity includes being one of greater than and less than the expected quantity (sections 58-59 on pages 8-9, fig. 6, and fig. 11).

With respect to claim 9, Teller teaches the variation includes a sequence of intervals varying from the expected quantity (fig. 11 and fig. 5).

With respect to claim 10, Teller teaches the sequence of variations includes one of a longest series of intervals or a plurality of a number of longer series for which data associated with the intervals varies from the expected quantity (fig. 11, fig. 7, and fig. 9).

With respect to claim 17, Teller teaches presenting the first representation of the data associated with each of the first significant intervals in a first format including at least one of a color and a fill pattern, the first format being different from that of the frame and other representations within the frame (fig. 11).

With respect to claim 19, Teller teaches identifying at least one additional data characteristic to be identified for the data associable with the number of intervals in the period (i.e., sleep and activity level characteristics are identified, item 360 in fig. 11). Teller teaches mining the body of data to identify a number of additional significant intervals, the additional significant intervals being intervals for which the at least one additional data characteristic is manifested in data associated with each of the additional significant intervals (i.e., retrieving a requested data, section 45 on page 6). Teller teaches presenting in the frame associated with each of the additional significant intervals an additional representation of the additional data characteristic such that the additional representation of the additional data characteristic is distinguishable from the first representation (i.e., item 355 in fig. 11).

With respect to claim 20, Teller teaches the data indicative of the first data characteristic includes data representative of a plurality of data sources and the data representative of the plurality of data sources is presented using a unified representation format (i.e. item 360 in fig. 11 and sections 25-26 on pages 2-3).

With respect to claim 21, Teller teaches associating a frame with each of a number of intervals in a period (i.e., item 355 in fig. 11). Teller teaches receiving at least one data characteristic from a user for which the user desires the at least one data characteristic be identified in data associable with the number of intervals in the period (i.e., item 360 in fig. 11). Teller teaches mining the body of data to identify a number of significant intervals, the significant intervals being intervals for which the at least one data characteristic is manifested in data associated with each of the first significant

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intervals (i.e., retrieving a requested data, section 45 on page 6). Teller teaches presenting in the frame associated with each of the first significant intervals a first representation of the data such that the first representation is different from that of the frame and other representations within the frame (i.e., item 355 in fig. 11), the representation including: determining a first number of points representative of a first data quantity associable with each interval, wherein a proportion of the first number of points to the maximum number of points represents a relative magnitude of the first data quantity; and contiguously displaying the first number of points in the frame for each of the intervals (i.e., item 355 in fig. 11, section 52 on page 7, sections 55, 56 and 58 on page 8, and fig. 5).

With respect to claim 22, Teller teaches each interval includes at least a portion of a day (i.e., item 205 in fig. 7 and item 355 in fig. 11).

With respect to claim 23, Teller teaches each interval includes a day and the period includes at least one week such that the frames are presented in a week table having days listed along a first axis and days of a week listed along a second axis (i.e., item 355 in fig. 11).

With respect to claim 24, Teller teaches each interval includes a day and the period includes at least one month such that the frames are presented in a month table having days of a week listed along a first axis and at least one week listed along a second axis (i.e., item 355 in fig. 11 and a user selectable time intervals, section 73 on page 10 and section 45 on page 6).

With respect to claim 25, Teller teaches each interval includes a day and the period includes at least one year such that the frames are presented in a plurality of month tables (section 73 on pages 10-11).

With respect to claim 26, Teller teaches the first data characteristic includes a variation from an expected quantity (sections 67-68 on page 10 and fig. 9).

With respect to claim 27, Teller teaches the expected quantity includes at least one of an expected number, an expected range, a control limit, and a standard deviation (section 67 on page 10 and sections 56 and 58 on page 8).

With respect to claim 28, Teller teaches the variation from the expected quantity includes being one of greater than and less than the expected quantity (sections 58-59 on pages 8-9, fig. 6, and fig. 11).

With respect to claim 29, Teller teaches the variation includes a sequence of intervals varying from the expected quantity (fig. 11 and fig. 5).

With respect to claim 30, Teller teaches the sequence of variations includes one of a longest series of intervals or a plurality of a number of longer series for which data associated with the intervals varies from the expected quantity (fig. 11, fig. 7, and fig. 9).

With respect to claim 31, Teller teaches the data quantity includes a number of occurrences and the first number of points represents a number of occurrences (i.e., item 355 in fig. 11, section 52 on page 7, sections 55, 56 and 58 on page 8, fig. 10, and fig. 5).

With respect to claim 32, Teller teaches the data quantity includes at least one measurement and the first number of points represents a magnitude of the

measurement (i.e., item 355 in fig. 11, section 52 on page 7, sections 55, 56 and 58 on page 8, fig. 10, and fig. 5).

With respect to claim 33, Teller teaches a proportion of the first number of points to the maximum number of points approximately equals a proportion of the first data quantity to a first data quantity limit (i.e., item 355 in fig. 11, section 52 on page 7, sections 55, 56 and 58 on page 8, fig. 10, and fig. 5).

With respect to claim 34, Teller teaches approximately equating the first data quantity limit to the maximum number of points (sections 56 and 58 on page 8).

With respect to claim 35, Teller teaches approximately equating the first data quantity limit to a maximum of the first data quantity for the period (sections 56 and 58 on page 8).

With respect to claim 36, Teller teaches the data indicative of the first data characteristic includes data representative of a plurality of data sources and the data representative of the plurality of data sources is presented using a unified representation format (i.e. item 360 in fig. 11 and sections 25-26 on pages 2-3).

The limitations of claims 37-46, 53, and 55-56 are rejected in the analysis of claims 1-10, 17, and 19-20 above respectively, and these claims are rejected on that basis.

The limitations of claims 57-72 are rejected in the analysis of claims 21-36 above respectively, and these claims are rejected on that basis.

The limitations of claims 73-78 and 82-83 are rejected in the analysis of claims 1, 6-10, and 19-20 above respectively, and these claims are rejected on that basis.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11-16, 18, 47-52, 54, 79-81, and 84-94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teller et al. (U.S. Publication No. 2006/0031102) in view of Luhrs (U.S. Publication No. 2005/0132300).

With respect to claim 11, Teller discloses the claimed subject matter as discussed above except determining a maximum number of points displayable within the frame. However, Luhrs teaches determining a maximum number of points displayable within the frame, determining a number of points representative of a data quantity associable with each interval, wherein a proportion of the number of points to the maximum number of points represents a relative magnitude of the first data quantity; and contiguously displaying the number of points in the frame for each of the intervals (i.e., item 36 in fig. 3, item 60 in fig. 4, and section 31 on page 3) in order to provide other visual ways to quickly gauge progress of data (section 6 on page 1). Therefore, based on Teller in view of Luhrs, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Luhrs to the system of Teller in order to provide other visual ways to quickly gauge progress of data.

With respect to claim 12, Luhrs further teaches the data quantity includes a number of occurrences and the first number of points represents a number of occurrences (i.e., item 36 in fig. 3, item 60 in fig. 4, and section 31 on page 3). Therefore, the limitations of claim 12 are rejected in the analysis of claim 11 above, and the claim is rejected on that basis.

With respect to claim 13, Luhrs further teaches the data quantity includes at least one measurement and the first number of points represents a magnitude of the measurement (i.e., item 36 in fig. 3, item 60 in fig. 4, and section 31 on page 3). Therefore, the limitations of claim 13 are rejected in the analysis of claim 11 above, and the claim is rejected on that basis.

With respect to claim 14, Luhrs further teaches a proportion of the number of points to the maximum number of points approximately equals a proportion of the data quantity to a data quantity limit (i.e., item 36 in fig. 3, item 60 in fig. 4, and section 31 on page 3). Therefore, the limitations of claim 14 are rejected in the analysis of claim 11 above, and the claim is rejected on that basis.

With respect to claim 15, Teller teaches approximately equating the data quantity limit to the maximum number of points (sections 56 and 58 on page 8).

With respect to claim 16, Teller teaches approximately equating the data quantity limit to a maximum of the data quantity for the period (sections 56 and 58 on page 8).

With respect to claim 18, Teller discloses the claimed subject matter as discussed above except the first format is user-selectable. However, Luhrs teaches the first format is user-selectable (section 30 on page 3) in order to provide other visual

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ways to quickly gauge progress of data (section 6 on page 1). Therefore, based on Teller in view of Luhrs, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Luhrs to the system of Teller in order to provide other visual ways to quickly gauge progress of data.

The limitations of claims 47-52 and 54 are rejected in the analysis of claims 11-16 and 18 above respectively, and these claims are rejected on that basis.

The limitations of claim 79 are rejected in the analysis of claim 11 above, and the claim is rejected on that basis.

With respect to claim 80, Teller teaches presenting the first representation of the data associated with each of the first significant intervals in a first format including at least one of a color and a fill pattern, the first format being different from that of the frame and other representations within the frame (fig. 11).

The limitations of claim 81 are rejected in the analysis of claim 18 above, and the claim is rejected on that basis.

With respect to claim 84, Teller teaches a frame presenter configured to associate a frame with each of a number of intervals in a period (i.e., item 355 in fig. 11). Teller teaches an identifier configured to identify a first data characteristic to be identified for data associable with the number of intervals in the period (i.e., item 360 in fig. 11). Teller teaches a data mining system configured to mine the body of data to identify a number of first significant intervals, the first significant intervals being intervals for which the first data characteristic is manifested in data associated with each of the first significant intervals (i.e., retrieving a requested data, section 45 on page 6). Teller

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teaches a display apparatus configured to present in the frame associated with each of the first significant intervals a first representation of the data indicative of the first data characteristic (i.e., item 355 in fig. 11). Teller does not explicitly disclose determining a maximum number of points displayable within the frame. However, Luhrs teaches determining a maximum number of points displayable within the frame, determining a number of points representative of a data quantity associable with each interval such that a proportion of the number of points to the maximum number of points represents a relative magnitude of the first data quantity; and contiguously displaying the number of points in the frame for each of the intervals (i.e., item 36 in fig. 3, item 60 in fig. 4, and section 31 on page 3) in order to provide other visual ways to quickly gauge progress of data (section 6 on page 1). Therefore, based on Teller in view of Luhrs, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Luhrs to the system of Teller in order to provide other visual ways to quickly gauge progress of data.

With respect to claim 85, Teller teaches the first data characteristic includes a variation from an expected quantity (sections 67-68 on page 10 and fig. 9).

With respect to claim 86, Teller teaches the expected quantity includes at least one of an expected number, an expected range, a control limit, and a standard deviation (section 67 on page 10 and sections 56 and 58 on page 8).

With respect to claim 87, Teller teaches the variation from the expected quantity includes being one of greater than and less than the expected quantity (sections 58-59 on pages 8-9, fig. 6, and fig. 11).

With respect to claim 88, Teller teaches the variation includes a sequence of intervals varying from the expected quantity (fig. 11 and fig. 5).

With respect to claim 89, Teller teaches the sequence of variations includes one of a longest series of intervals or a plurality of a number of longer series for which data associated with the intervals varies from the expected quantity (fig. 11, fig. 7, and fig. 9).

The limitations of claim 90 are rejected in the analysis of claim 84 above, and the claim is rejected on that basis.

With respect to claim 91, Teller teaches presenting a first number of data points in a first format including at least one of a color and a fill pattern (fig. 11).

With respect to claim 92, Teller discloses the claimed subject matter as discussed above except allowing a user to select the first format. However, Luhrs teaches allowing a user to select the first format (section 30 on page 3) in order to provide other visual ways to quickly gauge progress of data (section 6 on page 1). Therefore, based on Teller in view of Luhrs, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Luhrs to the system of Teller in order to provide other visual ways to quickly gauge progress of data.

With respect to claim 93, Teller teaches identifying a second data characteristic to be identified for the data associable with the number of intervals in the period (i.e., sleep and activity level characteristics are identified, item 360 in fig. 11). Teller teaches mining the body of data to identify a number of second significant intervals, the second significant intervals being intervals for which the second data characteristic is

manifested in data associated with each of the second significant intervals (i.e., retrieving a requested data, section 45 on page 6). Teller teaches presenting in the frame associated with each of the second significant intervals a second representation of the data indicative of the second data characteristic (i.e., item 355 in fig. 11).

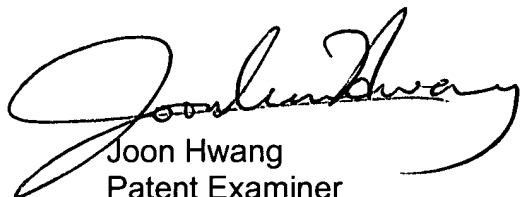
With respect to claim 94, Teller teaches the data indicative of the first data characteristic includes data representative of a plurality of data sources and the data representative of the plurality of data sources is presented using a unified representation format (i.e. item 360 in fig. 11 and sections 25-26 on pages 2-3).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joon H. Hwang whose telephone number is 571-272-4036. The examiner can normally be reached on 9:30-6:00(M~F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Joon Hwang', is written over the printed name.

Joon Hwang
Patent Examiner
Technology Center 2100

1/4/07